Remarks

Preliminary Matters

Claims 2-4, 8-10 and 27 are presented for reconsideration. Claims 1, 5-7 and 11-26 have been canceled.

All references to paragraph numbers are to those of the Official Publication hereof, US 2005/0096966 Al.

The Specification has been amended to conform reference numerals in the text to those of Fig. 5 of the Drawings. Sheet 6 of the Drawings has been amended to identify Fig. 8. No new matter has been added.

Rejections Under 35 U.S.C. § 103

Claims 3-4, 8 and 27 were rejected under U.S.C. 103(a) as being unpatentable over Mori *et al.*, U.S. Patent Application Publication No. 2003/0055695 (Mori) in view of J. Bailey, A. Poulovassilis and P. Wood: "An Event-Condition-Action Language for XML" (Pub. 2002) (Bailey), and further in view of H. Herbst, G. Knolmayer, T. Myrach and M. Schlesinger: "The specification of business rules: A comparison of selected methodologies" (Pub. 1994) (Herbst).

Mori discloses generation of a process model having information extracting tasks (work items) of a project and representing a mutual dependence relation among the tasks (paragraph [0007]. The Examiner interprets this model as an active dependency unit. However, while Mori's model may provide alerts as to failures in an ongoing project, Mori does not disclose propagation of state changes among the dependencies by conveying events, as required by the elements in claim 27 ("conveying a third event . . . and outputting a functional state of the business model responsively to at least the third event").

The Examiner cites Bailey as teaching ECA rules in combination with Herbst as disclosing a classification of different methodologies for representing business rules, including an Entity-Relationship-Rules-Model (ER-RM), citing their respective deficiencies. The ER-RM was noted by the Examiner at page 4 of the Official Action. In particular, Herbst discloses at Sec. 3.2.2.1:

> "An interesting enhancement of ERM with respect to the concepts of events and rules is the Entity-Relationship-Rules Model (ER-RM) [30]. In this proposal a new construct is introduced which represents situation-action rules to <u>control the states of entities, relationships and their attributes</u>. A situation is defined as a binary tuple of an event and an associated condition; the rule is said to be true or to happen when the event occurs and the condition is satisfied. [emphasis supplied]

At most application of the ER-RM can affect the state of a single entity in the model, but is incapable of changing the model by propagation of the effect of a state change in one entity to other entities. Indeed, Herbst makes this point explicitly, at page 17:

> "The ER-RM is the only method regarded which provides an explicit construct for modeling business rules. However, only structural aspects of the rules may be represented and <u>dynamic interdependencies are neglected</u>." [emphasis supplied].

Furthermore, the Examiner concedes, at page 6 of the instant Office Action, that "The Mori/Bailey/Herbst combination do not expressly disclose responsively to the situation, conveying a third

event from the situation awareness unit to the active dependency integration unit". Although The Examiner asserts that Mori discloses (claim 7) "outputting a functional state of the business model responsively to at least the third event". Applicant respectfully disagrees. In any case, Mori does not disclose that the recited functional state comprises "propagating a change to at least a second business component" as claimed in amended independent claim 27.

Applicant believes that independent claim 27 is patentable over Mori in view of Bailey and Herbst, as these references fail to disclose or suggest the cooperation of a situation awareness unit, which detects "situations" that reflect changes in the states of the business components in the model, and generates events in response to these situations; and

An active dependency integration unit, which maintains a definition of the dependencies in the business model, and propagates events among the business components in the model on the basis of the dependencies.

Claim 2 was rejected under U.S.C. 103(a) as being unpatentable over Mori in view of Bailey in further view of Herbst and in further view of Parad, U.S. Patent No. 5,369,570 (Parad). Claims 9-10 were rejected under U.S.C. 103(a) as being unpatentable over Mori in view of Bailey in further view of Herbst and in further view of Nye, U.S. Patent No. 6,341,279 (Nye). These claims all depend from claim 27, and are believed to be allowable as pending from an allowable base claim.

Concluding Matters

Applicant respectfully requests entry of this response as complying with requirements of form.

Please charge any fees associated with this response to Deposit Account 09-0468.

                                    Respectfully submitted,

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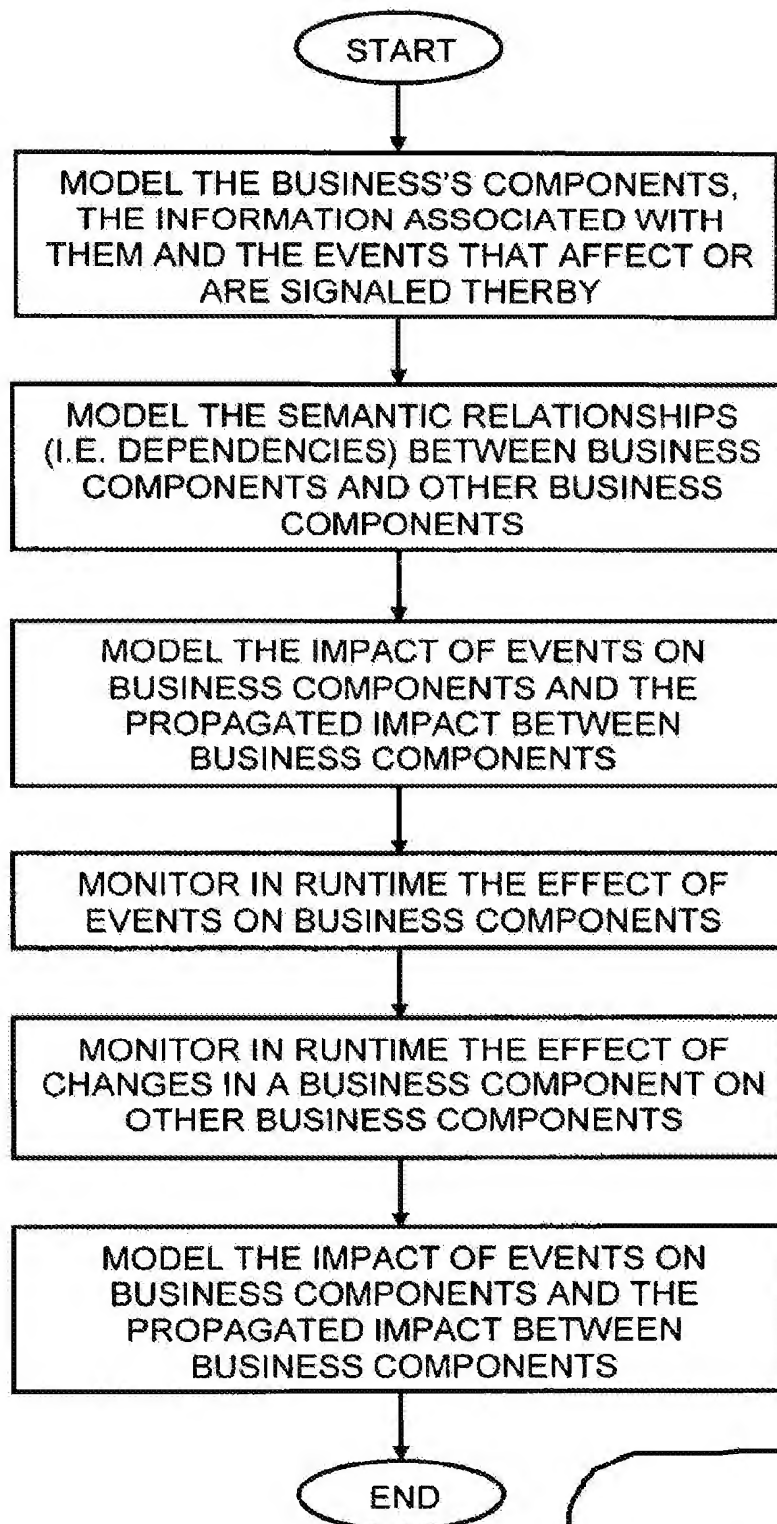Yorktown Heights, New York 10598

START

MODEL THE BUSINESS'S COMPONENTS, THE INFORMATION ASSOCIATED WITH THEM AND THE EVENTS THAT AFFECT OR ARE SIGNALED THERBY

MODEL THE SEMANTIC RELATIONSHIPS (I.E. DEPENDENCIES) BETWEEN BUSINESS COMPONENTS AND OTHER BUSINESS COMPONENTS

MODEL THE IMPACT OF EVENTS ON BUSINESS COMPONENTS AND THE PROPAGATED IMPACT BETWEEN BUSINESS COMPONENTS

MONITOR IN RUNTIME THE EFFECT OF EVENTS ON BUSINESS COMPONENTS

MONITOR IN RUNTIME THE EFFECT OF CHANGES IN A BUSINESS COMPONENT ON OTHER BUSINESS COMPONENTS

MODEL THE IMPACT OF EVENTS ON BUSINESS COMPONENTS AND THE PROPAGATED IMPACT BETWEEN BUSINESS COMPONENTS

END

Fig. 8